

A case-control study on oral health-related quality of life in kidney disease patients undergoing haemodialysis

Amir H. Pakpour · Santhosh Kumar · Bengt Fridlund ·
Stefan Zimmer

Received: 25 January 2014 / Accepted: 4 November 2014
© Springer-Verlag Berlin Heidelberg 2014

Abstract

Objective The study aims to assess the influence of oral health status and socio-behavioural variables on oral health-related quality of life (OHRQoL) in a sample of Iranian haemodialysis (HD) patients.

Materials and methods The present case-control study included 512 patients undergoing HD and 255 healthy controls from Iran. A self-reported questionnaire was used to record socio-demographic variables. In addition, laboratory and clinical variables of each patient were extracted from clinical and patient's electronic records. A closed-ended questionnaire was framed in order to assess oral health knowledge, attitudes and behaviour of each subject. The Short Form Health Survey (SF-36) and Oral Health Impact Profile-14 (OHIP-14) were used respectively to assess general health-related quality of

life (GHRQoL) and OHRQoL. All subjects were clinically examined by two trained and experienced dentists for caries by decayed, missing and filled teeth index (DMFT), dental plaque by visible plaque index (VPI), gingival status by Loe and Silness gingival index (GI) and periodontal status by community periodontal index (CPI).

Results Statistically significant differences were found between HD patients and control subjects for all oral health indices. Patients had significantly ($p < 0.001$) higher mean DMFT, VPI and GI values than controls. Periodontal pockets deeper than 4 mm were more frequently diagnosed in HD patients ($p < 0.001$). HD patients reported significantly poorer GHRQoL and also a higher impact of oral health (i.e. poorer OHRQoL) in comparison with the healthy controls ($p < 0.01$). **Conclusions** Oral health status, clinical variables, socio-behavioural factors and GHRQoL were significant predictors of OHRQoL in Iranian HD patients.

Clinical relevance The study findings support the assumption that patient-reported measures can be used to predict treatment need since the objective clinical variables were significantly related to subjective self-reported quality of life in HD patients.

Keywords Oral health-related quality of life · Dialysis · Ageing · Oral health · Iran

A. H. Pakpour
Social Determinants of Health Research Center, Qazvin University of
Medical Sciences, Shahid Bahonar BLV, Qazvin 3419759811, Iran

A. H. Pakpour (✉)
Department of Public Health, Qazvin University of Medical
Sciences, Qazvin, Iran
e-mail: Pakpour_Amir@yahoo.com

A. H. Pakpour
e-mail: apakpour@qums.ac.ir

S. Kumar